

Definitions and Proposed Uses of Environmental Public Health Indicators

An **indicator** identifies and communicates a system's status. An **environmental public health indicator (EPHI)** provides information about a population's health status with respect to environmental factors. It can be used to assess health or a factor associated with health (i.e., risk factor, intervention) in a specified population through direct or indirect measures.

Indicator Topic: An indicator topic is a broad category under which indicators are organized. Although an indicator may be included under only one topic, it also may have relevance across other topics. EPHI topics are based on Healthy People 2010 and may overlap because of the complexity of environmental and public health laws and programs. Therefore, topics may include pathways or sources (e.g., air, water), agents (e.g., lead, pesticides), or events (e.g., disasters, sentinel events).

Type of indicator: The type of an indicator describes how the indicator “fits” within the EPHI framework. An indicator will be categorized as a hazard, exposure, health effect, or intervention.

Hazard indicators: Conditions or activities that identify the potential for exposure to a contaminant or hazardous condition.

Exposure indicators: Biologic markers in tissue or fluid that identify the presence of a substance or combination of substances that could harm an individual.

Health effect indicators: Diseases or conditions that identify an adverse effect from exposure to a known or suspected environmental hazard.

Intervention indicator: Programs or official policies that minimize or prevent an environmental hazard, exposure, or health effect.

Tiers of indicators and their measures: The tier suggests the importance of the indicator and its measure with respect to policy or program considerations. Tiers include core, optional, and developmental. An indicator in the core tier can have core, optional, and developmental measures.

Core: A core indicator or measure is one that may be included in a state health department's basic environmental public health surveillance program. Measurements for these indicators either may be available or could be made readily available. Core indicators, endorsed in 2001 by the Council of State and Territorial Epidemiologists, have been identified for state health department use.

Optional: An optional indicator or measure may be part of a basic environmental public health program for some states, depending on individual needs, priorities, and data availability. A minimum of one optional measure will be identified for an optional indicator. When a core measure is identified, the indicator will change from optional to core.

Developmental: A developmental indicator or measure is one that may have environmental public health relevance, but measurements either have not yet been established or pose significant interpretation challenges.

Proposed Use of Indicators

Enable surveillance of status or trends to prevent known or suspected adverse public health events associated with environmental exposures, detect new adverse health events associated with environmental exposures, and provide efficient and consistent reporting mechanism(s).

Track program goals and objectives to aid in program and policy development, planning, and evaluation and support existing programs, guide research initiatives, and develop new program initiatives.

Build environmental public health capacity within state agencies to provide services, programs, and research that will sustain health.